

## ROBOTIC SWIVEL

Jet Edge's Robotic Swivel directs ultra-high pressure (UHP) water for coating removal, cleaning, and deburring. The Robotic Swivel is designed for use with Motion Controlled and Robotic cleaning systems. Typical applications include preparation for recoating or repainting, stripping corrosion, coating overspray, paint scale, rust, parts cleaning, part carrier cleaning, mold release residue, and many more.



## Construction

Water is supplied from a UHP intensifier pump producing up to 55,000 psi (3,800 bar) of water pressure. The water is

extruded through a rotating manifold containing sapphire orifices or fan tip aperatures to produce a concentrated stream. Water pressure is regulated directly by means of adjusting the output of the UHP pump. Water flow rate is determined by the quantity and size of orifices used in the various manifolds.

Manifold rotation is achieved by a pneumatic motor that drives a high speed swivel assembly. When a signal is supplied to the solenoid valve on the control box, air is routed to the pneumatic motor which rotates the water manifold via a drive belt. At the same time air is also sent to the pneumatic cylinder on the water on/off valve which opens the valve. A flow conrol valve allows the operator to regulate rotational speed of the manifold. At the same time, the pressurized water supplied by the UHP pump passes through the central shaft assembly and out through sapphire orifices which shape the water stream. The rotation speed is regulated by adjusting the air flow. The assembly is designed so the water supply can flow directly from the UHP pump, or selectively started and stopped by an on/off valve mechanism such as a Jet Edge OmniJet®.

## **Specifications**

Length with OJ & Manifold
 Height
 Depth
 Weight
 Weight
 20.25 in (51.4 cm)
 in (15.2 cm)
 4 in (10.2 cm)
 11 lbs (5.0 kg)

Air supply
Rotation Speed
85-90 psi at 25 CFM (approximately 6 bar)
1500 RPM, no load (other speeds available)

Reaction Force
 Water supply
 Water pressure
 36 lbs Maximum
 Potable tap water
 55,000 psi (3,800 bar)

## **Options**

- Selection of orifices and manifolds in various sizes and configurations
- Manifolds can be designed to fit your application



Specifications subject to change.

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